# Ayush Goyal

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## **EDUCATION**

## DELHI TECHNOLOGICAL UNIVERSITY

B.Tech, Information Technology 2019 - 2023 | New Delhi, India GPA: 9.24 (till 6th semester)

## **HHF SCHOOL**

2019 | New Delhi, India Class 12th : 92%

# DELHI PUBLIC SCHOOL MATHURA ROAD

New Delhi, India Class 10th CGPA : 10

## LINKS

Portfolio://ayushgoyal.dev GitHub://ayush6624 LinkedIn://ayush-goyal6624 CodeChef://ayush6624

## COURSEWORK

## **UNDERGRADUATE**

Data Structures And Algorithms Object Oriented Programming Database Management System Operating System

## SKILLS

#### **PROGRAMMING**

Languages:

C • C++ • Python • JavaScript

• TypeScript • C#

Web Development:

React • NextJS • HTML • CSS

• NodeJS • MongoDB • Docker

Machine Learning:

Deep Learning • OpenCV

• Tensorflow

Misc:

AWS • Bash

## POSITIONS

- Head Web Technology at IOSD DTU
- Web Core Team Member at Google

Developer Student Club DTU

## **EXPERIENCE**

## MICROSOFT | SOFTWARE ENGINEER INTERN

May 2022 - July 2022 | Hyderabad, India

- Integrated the **Policy Enforcement** scenario which will lead to an annual savings opportunity of **\$4.5M** and **improve CSAT** ratings.
- Used **C#** to integrate with the **MVS** API and achieved >80% code coverage within the given **SLA**.
- Worked with the **USTRL** and **AMC** team to ensure **E2E integration**.

## PABIO (YC S21) | JAVASCRIPT ENGINEERING INTERN

Apr 2021 - Apr 2022 | Switzerland

- Built and maintained the user-facing website and internal platform using NextJS and TypeScript; Created API endpoints in NestJS and Prisma.
- Created a monorepo using Rush, integrating all the packages along with auto-generated types, documentation and parallel builds.
- Built CI pipelines and helped in architecting and managing services running on AWS and GCP.

## TRIPMOKSHA | SOFTWARE DEVELOPER INTERN

Jan 2020 - Mar 2020 | New Delhi, India

- Used Python, Flask, MongoDB and Firebase to develop REST APIs.
- Integrated a payment pipeline using Stripe and Mailgun.

## **PROJECTS**

## MICROSOFT TEAMS CLONE | Code

- **Designed and developed** a fully-featured clone of MS Teams with **agile** methods using **NextJS**, **Prisma**, **Express** and **TypeScript**.
- Supports video call, group chat, OAuth authentication, background filters, toast notifications, detailed analytics using web beacons.
- Equipped to handle 25+ participants exchanging media via an SFU provided by Twilio.

## VIRTUAL DANCE PARTY | Code

- Used **Javascript** to develop a fun app to host **virtual dance parties** where participants can **dance together** as **animated stickmen**.
- Used **Tensorflow** and **PoseNet** Model to estimate the pose using the camera of the device.
- Rendered animated 2D stickmen using Two.js (~25 FPS).
- Used **Spotify SDK** to stream and control **music** in the dance room.

## **DRONE DELIVERY** | Code

- Developed a system to devise a **cost-effective route** for a truck and **multiple drones** to transport packages to a **network** of delivery nodes.
- Used **K-Means** to **cluster** delivery nodes and used **TSP** with **heuristics** to identify the truck routes.
- Implemented ILP formulation of multiple salesman problem to generate drone routes. Used JavaScript, Google Maps API to illustrate them.
- Reduced compute time by 95% and increased route efficiency by 34%.